

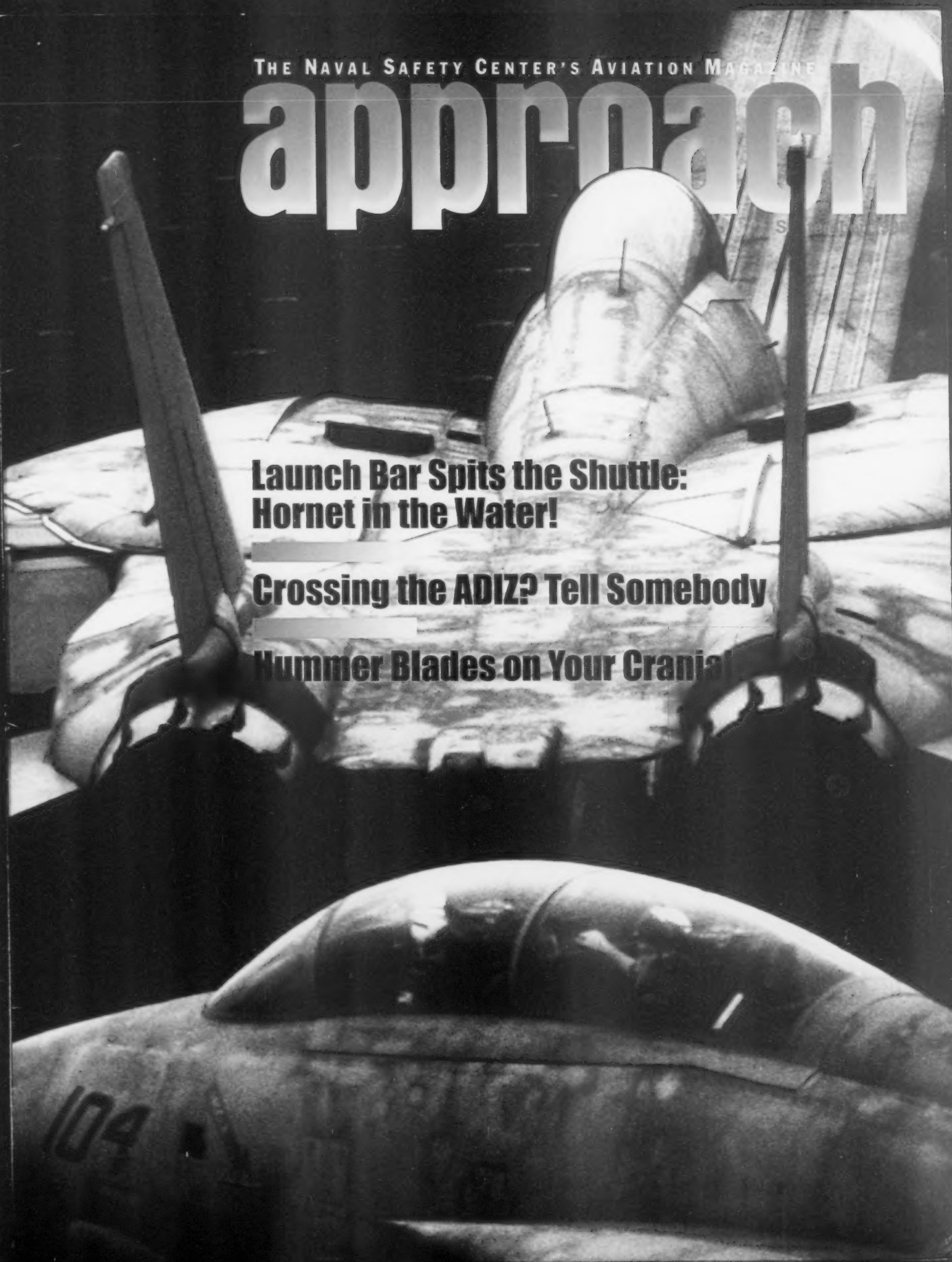
THE NAVAL SAFETY CENTER'S AVIATION MAGAZINE

approach

**Launch Bar Spits the Shuttle:
Hornet in the Water!**

Crossing the ADIZ? Tell Somebody

Hummer Blades on Your Cranial



approach contents

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Tomcats cluster on a catapult.
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The catapult fired, and I selected full afterburner, but 40 feet down the track, my launch bar spit the shuttle.

John W. Williams

What Happened to My Bear

by LCdr. Tom Halley

OUR CARRIER WAS 150 MILES SOUTH of Roosevelt Roads, and we were knee-deep in the war with the country of Orange. The conflict had been going well for our side, and I was scheduled for a 1+30-cycle PMCF. After the profile "c" was complete, I had briefed a 1 v 1 with one of the CAP players. Life was good.

The FCF was for a starboard aileron

change, and the preflight checks were 4.0. I taxied onto cat 2 and gave a thumbs-up for a 44K shot. The yellowshirt signaled to take tension, then gave me the launch-bar-up signal in one continuous motion. [The director's almost simultaneous signals for tension and launch bar up were not according to CV NATOPS. The proper sequence is:

1. Signal pilot brakes off.



2. Give the tension signal to the ICCS.

3. After the aircraft is tensioned, signal the pilot to retract the launch bar.—Ed.]

My Hornet squatted, and I waited a “two count” and raised the launch bar. The wipeout was normal, I checked the engine instruments, and I was ready to go. I touched the ejection handle, just to make sure I wasn’t sitting on it, gave my best salute and

grabbed the towel rack.

Then the beautiful day suddenly got ugly. The catapult fired, and I selected full afterburner, but 40 feet down the track, my launch bar spit the shuttle. The FA-18’s nose came out of its crouched posture, and it felt like I had just deployed a drogue chute on a high-performance dragster.

As the ship steamed past me, I thought I was going to kill me for trashing his 40-million-dollar jet. Also, I began to wonder if I had screwed something up.

My first thought was to stomp on the brakes to stop the aircraft on the flight deck. I pushed on the brakes, but I wasn't sure if my feet actually responded (the ILARTS tape actually revealed that there was no smoke coming from the tires, so I think my feet didn't respond). The entire time I was thinking about pushing the brakes, I still had full afterburner selected, and I was not about to pull the power to idle. On a catapult stroke, this is an unnatural act for any naval aviator.

The whole time these thoughts were going through my mind, the end of the flight deck was rapidly approaching, and I was not going to be able to stop.

"It's time to go," was the last thing that crossed my mind before I pulled the handle. I noticed the wire safety net and blue water. I looked down in the cockpit and pulled the handle.

There was a puff of yellowish-gray smoke, then all was black. I was still conscious; I just couldn't see. I felt myself tumbling head-over-heels before the chute opened, followed by a sudden snap of my body. It almost felt like being blindsided by a pulling guard.

The next thing I thought of was a 90,000-ton warship running over the top of me, and I began to panic. When the chute opened, my eyes did, too. I was facing the ship and could

see that I was going to land about 50 yards off the port bow.

I got one good swing in the chute and was able to pull my beaded rings before entering the water. I reached for the koch fittings just as I hit. I still had my mask on and was able to breathe with some difficulty from the emergency oxygen in the seatpan. I popped out of the water and tried again to reach the koch fittings, but SEAWARS had beaten me. My parachute was 20 feet away by now, and there was no danger of entanglement.

I gave a quick thumbs-up to the hordes gathered on the port side of the flight deck. I felt very lucky to be alive.

As the ship steamed past me, I thought the skipper was going to kill me for trashing his 40-million-dollar jet. Also, I began to wonder if I had screwed something up. I assumed these were natural emotions after an ejection, but I wasn't too sure. As I waited for the plane guard to arrive, I saw two of my drop tanks floating on the port side of the carrier, and there was a distinct odor of JP-5 in the water. I actually rested my feet on one of the drop tanks as it floated by. I kept trying to push it away from me so it wouldn't hamper the SAR effort.

The H-60 arrived, and this was the first time that I actually swallowed any sea water. The helicopter's rotors kicked up a huge

nt the skipper was
llion-dollar jet.
ved something up.


wake, and it was impossible to see. I remembered my water-survival and D-west training, lowered my visor, and turned my back to the helo. The SAR swimmer hooked my D-ring to the hoist, I hugged the wire and crossed my legs just as we had been taught, and the next thing I knew, I was in the helo.

In retrospect, every aviator wonders if he will know when it is time to eject and if he will remember all the water-survival and D-west procedures. Believe me, you'll know! They will flood your mind and save your life.

Here are some lessons I learned.

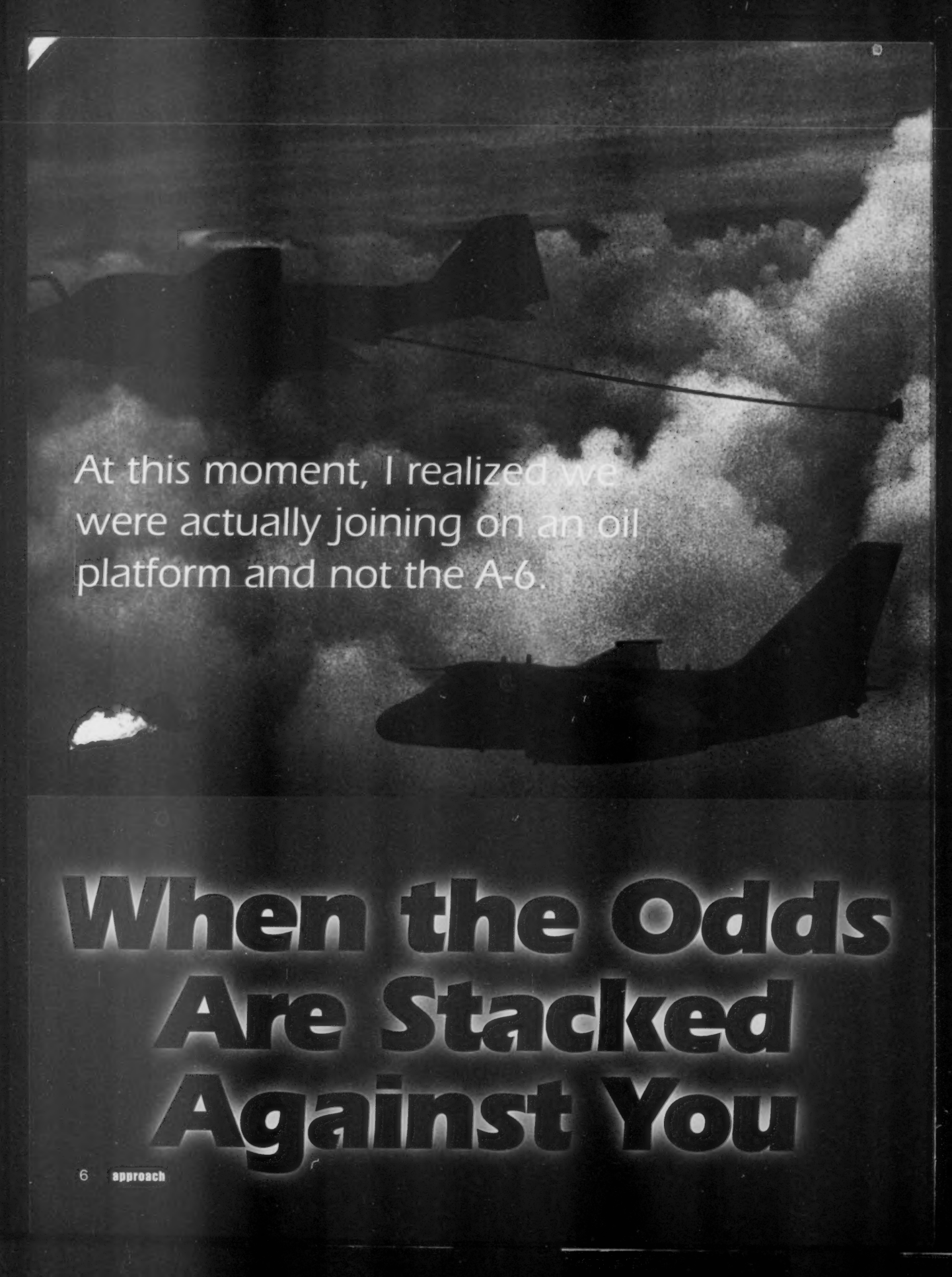
Don't raise the launch bar until you feel the aircraft squat. Raising the launch bar before the shuttle has moved forward can result in the launch bar not properly seating in the shuttle.

Know where your ejection handle is at all times, especially on the catapult. Think about touching the ejection handle just before you salute.

The procedures you learned at water survival and D-west will save your life. Recently, the interval between swim quals has been lengthened from three to four years, so pay attention when you go to a refresher class. It's time well spent. 

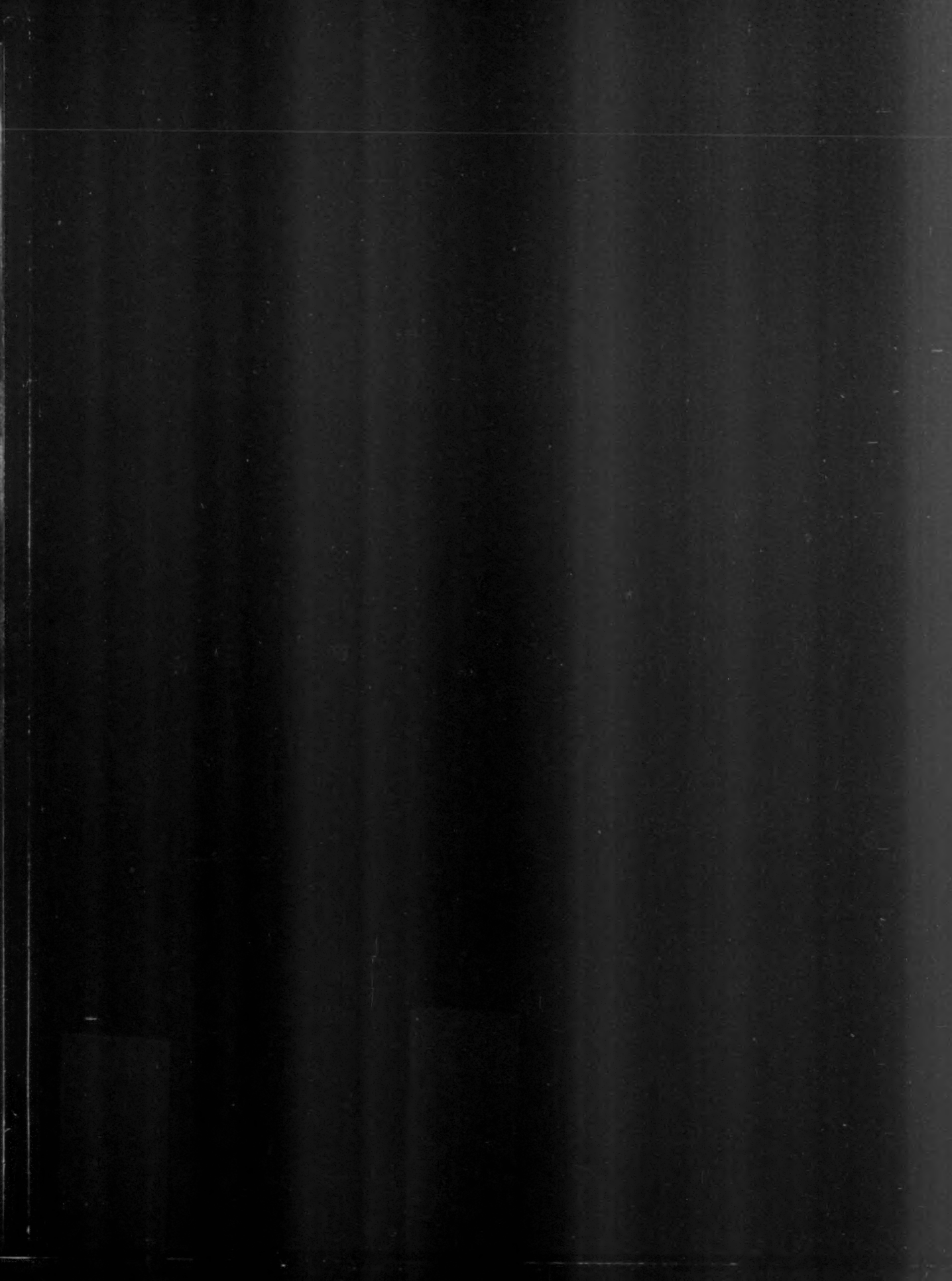
LCdr. Halley flies with VFA-81.





At this moment, I realized we were actually joining on an oil platform and not the A-6.

When the Odds Are Stacked Against You



by Lt. Carl Vause

LATE IN MY FIRST CRUISE, our air wing was enjoying its fourth month in the Arabian Gulf, eagerly anticipating our impending exit. The skipper had just started to allow nugget-nugget front-seat flights, and I was scheduled for the night-recovery tanker with a nugget pilot. We still had the necessary parental guidance with an O-4 in the back seat. Although it was night and we were a non-standard crew, each of us had flown the night-recovery tanker mission many times in the Gulf. The entire flight seemed like an easy way to get a night trap.

Our first indication things were going to be different was when departure announced, "Expect CV-Three recovery." My pilot and I both looked at each other and began digging into our kneeboard cards to find the CV-Three recovery gouge. The next indication of a bad night was the realization the tanker stack would have to be located somewhere other than overhead because of the CV-Three overhead marshal.

Approaching the cat, we called Tanker King, a double-cycle S-3, which would set up the package checks for our S-3 and the A-6 tanker that was also launching. Tanker King told us to meet them at 020/20, angels seven. These were not the procedures we had grown to know and love, but the people in control were doing what they could to keep the tankers clear of the marshal stack.

After launch and some good work on the back radio, we joined and checked sweet. Normally, after the package check, the oncoming tanker would elevate to the next thousand-foot altitude, but departure had other ideas. As soon as we reported sweet, they told us to proceed to the 330/20, angels seven. It seemed this was not the easiest way to do business, but neither my pilot nor I had seen this situation before, so we headed to our assigned holding point.

En route, we listened as the A-6 called airborne and was sent to 140/20, angels seven for a package check. This was particularly interesting, because we had no idea who was going to package-check the A-6.

Be careful what you wish for, because the next thing we heard was, "Seven Oh Five, proceed to 140/20 and package check 513."

We had not even reached our first point, and now our concern became the marshal stack and safety of flight. ACT and SA began to break down as I focused on remaining clear of the stack and safely navigating to the next point, while the pilot concentrated on scanning outside and joining with the A-6.

During these moments, the radios became completely jammed as the recovery aircraft were having great pains with the CV-3 recovery. We were trying to maintain what little SA we had, while getting to the rendezvous point and finding the A-6. The whole game plan fell apart when departure announced, "Ninety-nine, Delta, vectors for recovery. Tankers hold 060/20, angels seven." We heard this at the same time we spotted the A-6. It should be noted that the A-6 had red strobes instead of the S-3's green tanker lights. These red strobes can at times closely resemble the flame of a burning oil platform.

Now my pilot put us in a hard, high AOB turn to sweeten the joinup. As soon as he smoothed out the turn, he announced, "I just gave myself vertigo."

Knowing the pilot well and knowing that he briefed vertigo, I thought, "Good headwork, letting the crew know." We were now trying to join on the A-6 while the pilot had vertigo and I had very little SA.

The joinup continued with me backing up the pilot as best I could. I was inside and outside concentrating on a good backup

as we closed on the A-6. I looked up and noticed what seemed to be an under-run situation developing.

I asked, "Why are we under-running?" and received no answer from my pilot. I watched the A-6 pass overhead and continue through our 9 to 6 o'clock and disappear. I then asked my pilot, "Are we going to join on the A-6?" "My blood ran cold as he replied, "I am joining on the A-6, on the nose."


I looked out and could not see any other airplanes, but I did see a burning oil platform. At this point, I was scanning as hard as I could to find the A-6, but I could only see a few burning oil platforms. After spending way too much time outside, I came inside for a quick scan and saw that our altitude was 5,500 feet, in a 2,000-fpm descent. At this moment, I realized we were actually joining on an oil platform not the A-6.

I prompted the pilot once, and then departure began to call us questioning our altitude. We were descending into the recovering aircraft. The back-seat NFO and I began calling altitude and trying to talk the pilot out of his vertigo. We were all relieved when we stopped our descent and began climbing. I looked down and tried to work a heading back to the tanker rendezvous point. Once again, departure prompted us about our altitude. I scanned inside and once again, we were in a 2,000-fpm descent trying to join on an oil platform. The back-seat NFO began to aggressively prompt the pilot and give him very directive calls, while I tried convincing departure we had the situation under control.

After a few tense moments and loud voices from all involved, we began a very controlled climb to angels seven and worked our way back to the tanker point.

On our way back, Tanker King called us, wondering where we were because they had just finished package-checking the A-6. We switched squadron tac and gave them a quick debrief. Once on deck, we did an extensive crew debrief, covering vertigo, spatial disorientation, ACT, and CATCC procedures.

We concluded that we had allowed departure to bounce the tankers around the sky. Had we recommended stacking all tankers at one point, departure would have probably complied, and the chain of events would have been broken. The situation was amplified when we became completely focused on joining with the A-6 and not maintaining our big-picture SA. The CATCC reps visited the ready room that night and were very interested in what had happened.

Realize how crippling vertigo can be, know when to confess you have it, and know when to back up the pilot. 

Lt. Vause flies with VS-35.



PH3 Timothy Smith

by Lt. Todd A. Dufault

WE WERE FLYING A ROUTINE SSC mission for the battle group off Okinawa. It was a nice day, our systems were up, and so were we. Our ship was approaching the carrier for an underway replenishment. The sea was calm, and everything was working as planned. Soon, however, we were called to the carrier for a possible medevac.

We accelerated to 140 knots. The flight to the carrier took 20 minutes, and we were cleared to Charlie spot 3 for a hot pump.

Once on deck, we heard the medevac would not be needed.

"Thanks for the help," the Boss said.

Before we got that message, though, our aircrewman had gotten out to make a walk-

Weak Leak, Weak Cheeks



around of our SH-60. At this point, time wasn't critical because the carrier had just completed its recovery and wasn't expecting the next wave for some time.

When our crewman got back in, he mentioned there was oil coming from the No. 1 engine's cowling. Not to worry. Both pilots had seen oil on the cowling before and figured it wasn't anything. The HAC got out ("Just to be on the safe side") and checked for himself. There did seem to be more oil than usual, but not too much.

The HAC got back in and discussed the situation with the crew. Homeplate was now only about 50 yards away, just off the carrier's starboard side. They could radio from the carrier to have the frigate set flight


quarters right now for recovery. It would only be a five-minute flight. Still, we weren't sure, and the HAC told the carrier we would be shutting down to check the leak.

After shutdown, we opened the cowling and to our surprise, the oil cap had come off, and the engine was low on oil.

With help from the air wing's HS squadron, some rags and engine oil, we cranked back up and landed back home.

This incident seems pretty simple until you look more deeply for potential problems. Both pilots had preflighted the engines and confirmed the oil caps were secure. Perhaps our buster flight to the carrier for the medevac might have set up vibrations that shook the cap loose.

All the engine instruments indicated normal throughout the flight, so there was enough oil, but just how much was left when we shut down?

The biggest plus for the flight was the crewman's decision to make an inspection when he had the chance, and our combined decision to stop safe on deck. Also, we were fortunate that the crewman had the confidence in himself and us to tell us about the leak. Coupled with the HAC's decision not to be lulled into a false sense of security by the closeness of homeplate, we had saved ourselves embarrassment and perhaps a dunking. 

Lt. Dufault flies with HSL 37.

W
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What's a FED at a Naval A

by Lt. Robert L. Curtis

I WAS FLYING FAT, DUMB, AND HAPPY 20 minutes after launching in textbook VFR conditions. We were heading to NAS Norfolk from our ship to pick up a part before continuing with our workups for a long cruise. As a new H2P, I was in the right seat enjoying the sights; after being at sea for so long, it was good to see land again (actually, we had been out for only a few days but I was new at this deployment stuff.)

"Chambers Tower," I called, "Venom Five One Five, currently on your one one zero for ten with information Delta.

"Roger, Venom Five One Five, don't have you in sight yet. Continue inbound. Report the field in sight."

"Chambers Tower, Venom Five One Five, wilco."

We continued westerly along the beach, trying to spot the field.

"I wonder if we'll shut down and hunt for this part," I mused. "Maybe we can grab one last lunch at McDonalds."

"OK," my HAC said, "I got the field at about three miles ahead. There's Norfolk International. Chambers is just beyond it. I'll let tower know. Break out the landing checklist."

"Chambers Tower, Venom Five One Five, we've got you in sight."

"Venom Five One Five, still don't see you. Say again position."

"Tower, Five One Five, about two miles out along the beach."

"Five One Five, still don't see you. Continue inbound, enter left downwind. You're cleared to land runway one zero."

"Roger, we're cleared to land."

I envisioned a blazing midair between our little, gray helo and a big, fat purple jet.

EX Jet Doing Air Station?

I got through the landing checks, reported checklist complete, and looked up to see us entering a nice left downwind as instructed. I took one last glance at the TACAN, and saw 2.3 on the DME.

"Two point three?" I asked myself. "We're right above the field, and the tacan needle is pointing off to the right, reading two point three. Oh, must be that slant-range distance thing."

"Want to tell him we're entering downwind?" I asked.

"Nah, he knows we're here."

We continued downwind. Sitting in the right seat, I couldn't see the runway, but I had a nice view of the ramp. I looked down and saw a purple jet parked alongside another large airliner.

"That's weird, what's Federal Express and USAir doing at Chambers Field?"

Something wasn't right. I looked at the tacan again. We were heading 230.

"Huh?" I said to myself. "That's a strange heading for downwind to one zero. I guess the tacan is messed up." Then I looked up as we rolled final. I saw runway 5 just as the HAC yelled, "Damn, we're at the wrong field!"

My heart stopped.

"Helicopter over Norfolk International, this is Norfolk Tower. Come up my frequency, two five seven point eight."

As the HAC explained to the tower why we were flying down their runway, I envisioned a blazing midair between our little, gray helo and a big, fat purple jet. It scared me. I listened to my HAC try to talk himself out of a flight violation, and I wondered how it could have happened. We knew where we were going. It was VFR, and we could see for miles. We had flown into Chambers a few days ago!

Continued on page 33.

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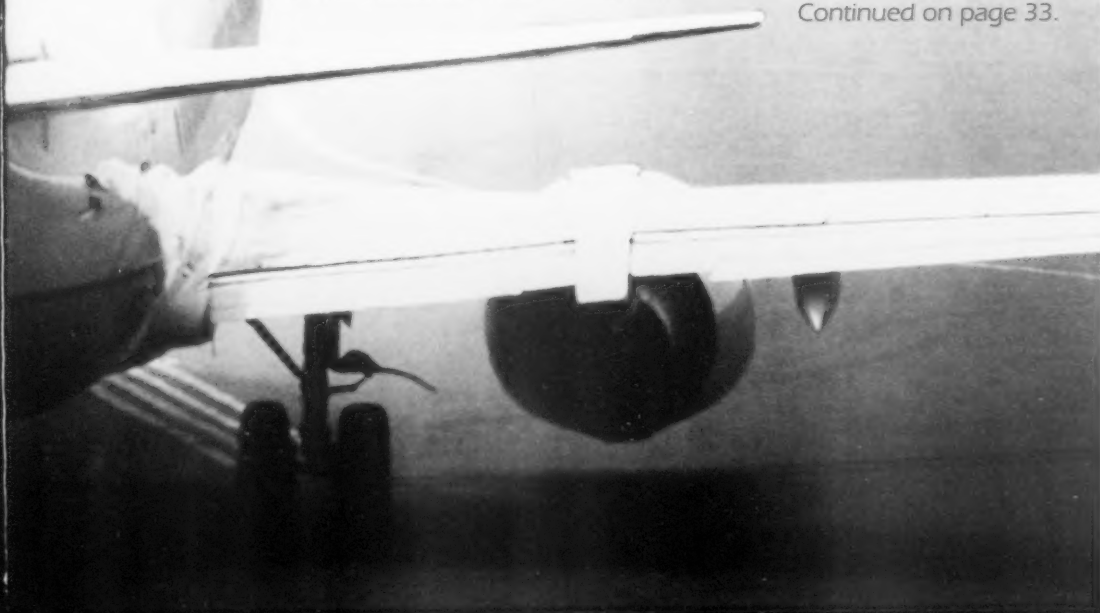
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Continued on page 33.



The Hummer Buz Almost Claims An

by Lt. Jeff Heiges

OUR SKIPPER TOLD US AT QUARTERS the week before our upcoming CQ period that it would be "more dangerous than anything we did during our workups." His comment seemed strange, because we had just finished some around-the-clock flying and had dropped 300,000 pounds of live ordnance. The CQ was to be a quick two-day period to get all wing pilots qualified before deploying the following week. However, as I look back on it, I can't help but think how right my skipper was.

All of the ingredients for disaster were present that evening. It was clear, but very dark, and toward the end of a 14-hour day on the flight deck. Cat 1 had just gone down for a maintenance problem, and the crowded flight deck had to be respotting to begin using cat 2. I was to hot-seat for one night trap, but the aircraft (along with another Hornet) had to be moved over to elevator 4 to clear cat 2. I had met with my plane captain, a young airman who had been qualified for four months but was working his first night on the flight deck. I tried to figure out how I was going to get over to my jet on the other side of the landing area.

We started walking along the starboard side of the landing area, next to the foul line in front of the island. My plane captain walked ahead of me as I stopped to ask a flight director the best way to get over to elevator 4 without fouling the landing area. I looked to see where my plane captain had gone. My heart sank as I saw him walk around an E-2 prop-safety and toward the spinning propeller of the Hawkeye. I started running toward him yelling (as if anybody was going to hear me on the flight deck). The prop-safety saw my plane captain just then and lunged toward him.

Fifteen feet in trail and feeling completely helpless, I watched in horror as the blade struck the airman's cranial right about the time the prop-safety pulled him away into the landing area. I actually heard the "bzzz" as the prop chopped off part of the plastic cranial.

Not knowing if he was OK, we took the plane captain inside to make sure. He said it felt like somebody had thumped him on the head. I had our flight-deck chief take him down to medical for further examination, where he was found to be fine. It was only then he realized what had actually happened and how lucky he was to still be alive.

I had never in my life come so close to seeing somebody die; I had to do some serious compartmentalizing before going flying.


Several causes of this accident came out during the investigation that followed. First, this CQ detachment was an add-on to our original workup plan and was scheduled in the middle of our POM (Preparation for Overseas Movement) period. As a result, we tried to minimize the number of troops who had to attend, thus giving some people a break. However, this also meant a limited number of supervisors on the flight deck. It can be argued as to whether everybody's head was in the game or was somewhere else thinking about leave before our six-month deployment.

Other contributing factors included the unanticipated deck re-spot, and a relatively inexperienced plane captain (his first night working on the flight deck) on his 14th hour of work.

We can learn several things from this near-tragedy. First, the carrier environment makes no allowances for anyone who works in, on, or around it. It only takes a second of inattention to lose life or equipment.

z saw nother Victim

Second, nothing we do short of war to defend our country, its principles, or our fellow man is ever worth your life. Everyone must keep his head in the game at all times and not take shortcuts or unnecessary chances.

Third, never get too comfortable on the flight deck. People who have devoted their careers to our profession will tell you the thing that has kept them alive all these years was attention to detail and looking out for each other. 

Lt. Heiges flies with VFA-131.

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The Hummer Buz Almost Claims Ar

by Lt. Jeff Heiges

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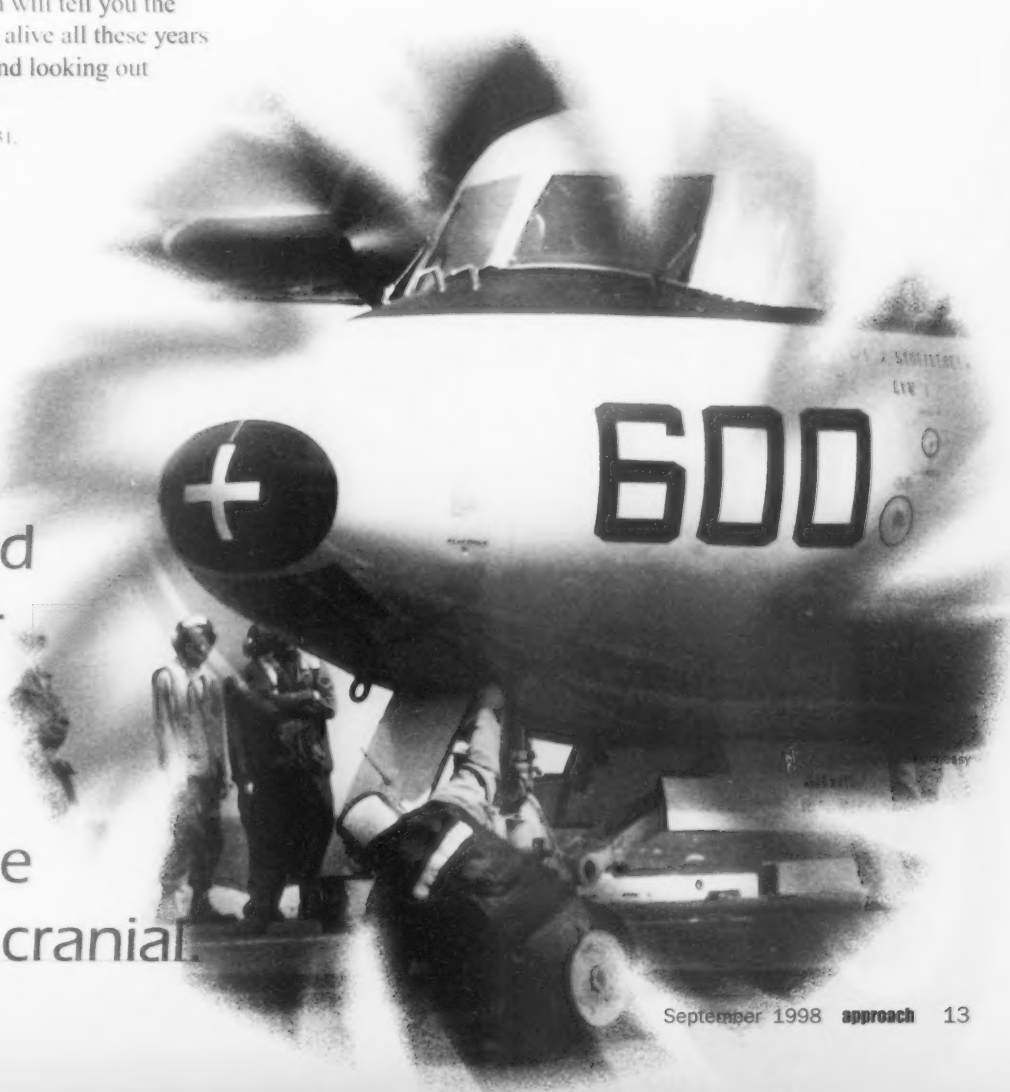
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Lt. Heiges flies with VFA-131.

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by LCdr. J.G. Johnson

I'VE HELD ONTO THIS STORY for a long time because two buddies were permanently grounded and their careers ended abruptly. Now, each has moved on to another life, and I would like to tell the story.

It was a warm, humid day in east Mississippi. I was an intermediate strike instructor in the T-2. I had three student hops scheduled for the day, and I was looking forward to the flight time. My students were all strong performers, so except for a long day, it all should have been pretty easy.

The first mission was a section-cruise hop. There was an IUT (instructor under training) in the other jet. He and the IP were both experienced Tomcat drivers.

Our brief, preflight, departure and first half of the flight went well. My student was working hard but doing nicely. We changed leads and started putting the IUT in the back seat of Dash 2 through the syllabus maneuvers.

On the first breakup and rendezvous, I took control of my plane in the back seat and set up the other plane for a training underrun. My aircraft decelerated as I pulled the power back. I watched the instructors in the other jet working their way down the bearing line, and they were doing OK. They crossed under and joined on the outside of the turn without doing the underrun procedures.

We started a left turn to set up for the next breakup and rendezvous. I couldn't see the gestures from the other pilots, since the wing of my jet blocked my view in the turn. Following an off-the-cuff suggestion from the other instructor, and without warning us, the IUT began a canopy roll to get my attention. The roll was too fast, and before they could correct and roll out on the inside, their right tip tank crashed through my canopy. In an instant, I was wet and could taste fuel. It was cold, windy and noisy. Everything went gray, and I felt the aircraft tumbling.

I immediately neutralized the controls and wiped the fuel from my eyes. When I could see again—after a few seconds that felt like several minutes—we were pointed about 180 degrees from our original heading and 10 degrees nose low, at 9,000 feet.

I was drenched with JP-5 and buffeted by the wind. I slowed the aircraft to 200 KIAS and tried to evaluate the condition of my plane. The tail and wings seemed OK,

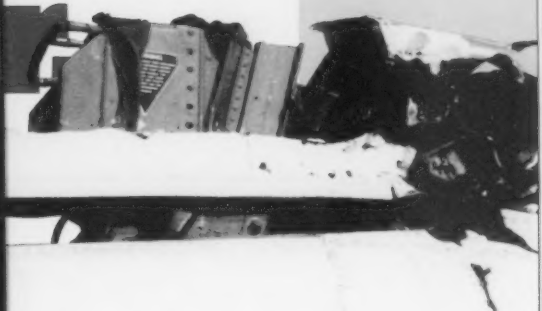


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and the plane was flying, so we weren't going to have to eject... for the time being.

The front cockpit appeared relatively unscathed, but I could communicate with my student only by shaking the stick and using hand signals when he looked at me in his mirrors. Our ICS was useless. I shook the stick right and left and pointed to my student, transferring control to him. I pointed toward the direction of home field to tell him to take us there.


I looked at my aircraft trying to determine what had happened. Then I saw the orange paint on the shattered canopy glass that still remained around the edge of the canopy. I knew we had had a midair. I looked for parachutes or smoke, or indication of the other plane and crew. I couldn't see anything and with no communications, I hoped the other pilots were OK.

My student got my attention and pointed to our briefed emergency divert field now below us. I gave him a thumbs-up, and we slowed to dirty up and check controllability. We put out the speed brakes. No problems. Next, the flaps to one-half, still OK. Finally we dropped the gear and got three down-and-locked. We spiraled down and I helped my student set up for a visual downwind approach.

We landed and rolled out to the right side of the runway. With my cockpit glass completely gone, I climbed out through the remnants of canopy. The other aircraft followed us down and landed after us. A short debrief right there filled in a lot of the gaps for me. I was relieved to know that no one was seriously hurt or killed. The major casualty was our Buckeye, which ended up being struck and used for spare parts. It had a large gash right behind the cockpit, a ruptured main fuel cell, and other structural and cockpit damage, including a ruined ejection seat.

In the days that followed, while recovering from mild neck pains, I went over the incident, trying to figure out why it happened.

Doing an unbriefed canopy roll is not part of the intermediate strike training syllabus. We don't need a lengthy discussion. Just don't do them.

I lived through this one, and hope that what I learned will help prevent future mishaps because someone feels they need to prove something. 

LCdr. Johnson flies with VR-55.



PH3 Christopher Mobley

Red Light the Boat

by Lt. Joel Jungemann

A 27-PLANE MIRROR-IMAGE STRIKE AT night? Sounds like just the thing to break up the mid-cruise monotony of non-stop ESM flights over Bosnia. The brief is in the smallest ready room on the ship, a fitting prelude to the congestion that will follow. The strike lead's brief for the recovery portion goes something like this: "There's going to be a ton of planes out there, so do your job and get aboard your first pass."

Hey, no problem. I haven't bolted at night all cruise (my day bolters were all hook skips, and we know those don't count.)

During pre-takeoff checks, I notice the radar-altimeter tone, while still audible, is not as loud as normal.

"Remind me to write that up when we get back," I tell ECMO 1, making a mental note. The rest of the checks look good, and we rocket into the moonless night (how many *Approach* articles describe a full moon?)

About halfway to station, ECMO 1 determines the navigation system is less than stellar. Well, that's why we briefed a backup tacan-cut off the ship. Of course, our station is 100 miles away and the tacan breaks lock at 80. We receive vectors from the E-2 to join up with our CAP escorts and are back in business. After 45 minutes of orbiting, the "comex" call comes. Amazingly, the strike goes as planned, and the real fun begins as 27 planes simultaneously head to marshal.

The marshal frequency is clobbered, and checking in is like pulling teeth. We manage to jump in and get our instructions. After calling established, we run through the descent checks.

We still have fuel in the wings. EA-6B NATOPS dictates the wings must be dry to trap. Unfortunately, emptying them may put you 1,500-2,000 pounds below max-trap weight.

"Looks like we may have to dump the rest of the wings if it doesn't transfer," I say. We push on time and the carnival ride begins.

"Six Two Zero," the ship calls, "take speed three hundred." Somebody's cheating over to final bearing again instead of flying the CV-1. Probably those zany Tomcat guys.

"Six Two Zero, check in button seventeen."

"Six Two Zero's checking in, speed three hundred, platform."

"Six Two Zero, take speed two twenty-five, left one zero zero." Sounds like CATCC really has their hands full tonight. I start dumping the wings to ensure they're empty.

"Six Two Zero, take speed two seventy-five, right one eight zero to intercept final bearing two zero zero. Stay clean through ten." Boy, it sure is dark out tonight.

"Six Two Zero, eleven miles, dirty up." Geez, I wish these guys would make up their minds. Slowing through 250 KIAS, the gear and flaps come down as the bullseye comes alive.

nt Behind

"OK," I call, "I've got one, two, three down-and-locked, thirty. Wait a sec, the flaps are still barberpoled. The stab did shift and the slats are all the way out. They'll come down once we get below two hundred knots."

At 160 KIAS, it is becoming clear that it's not the airspeed. As the PCLs come out, I'm trying to figure out what position the flaps are actually in. I think I saw them go through 20 degrees before barberpoling, but I was concentrating more on the ILS needles (which are rapidly going from bad to worse). The AOA looks reasonable for our airspeed with full flaps, so I'm pretty sure the flaps are somewhere between 20 and 30 degrees.

"I bet the flap handle just isn't seated all the way," I say, as talk of hydraulics and electrical flaps and slats circulates between the front and rear cockpits.

PH3 James E. Gallagher

"Wave off, wave off!"
Boy, that's going to look ugly
up on the greenie board.

...even
with four
sets of eyes
in the
cockpit, we
lost 400
feet (and
would
have lost
more if the
flaps hadn't
come
down
when
they did.).

"Six Two Zero, final radar contact, eight miles, fly the bullseye." Oh yeah, the bullseye. I wonder how that's coming.

"OK, I'm going to select twenty degree flaps and see what happens," I tell my crew. I look down and see 20-degree flaps indicated.

"Going back to thirty. That's more like it. OK, thirty, shifted, and out. We got it." Now I can concentrate on flying the... damn! How'd we come to be descending through 800 feet?

"Why didn't the radalt go off?" I wonder, as the throttles go to MRT.

"Six Two Zero, ACLS lock on, four miles, report needles."

"Up and right," I reply, more of a question than an answer.

"Six Two Zero, concur, fly, mode two. Hold you well right of course."

I concentrate on getting my head in the game and flying the stupid needles. Wow, I'm fast. Why won't this beast trim on speed? And how about that lineup? Am I going to get on centerline sometime today?

"Hey, did you turn the dumps off?" someone asks from the back. Crimeny! What else did I forget?

"Six Two Zero, above and right, three quarters of a mile, call the ball."

"Six Two Zero, Prowler, ball, seven point five."

"Roger, ball, you're lined up right."

Yes, I am, paddles. But at least I'm a ball-and-a-half high. I'm going to have to work for my par from here, folks.

"Don't go any higher," the LSO says.

"It's a little late for that call," I think, "seeing that the ball just went off the top." Hey, I haven't seen those red waveoff lights since FCLPs!

"Wave off, wave off!"

Boy, that's going to look ugly up on the greenie board.

"Six Two Zero, take angels one point two, report level." So much for doing my job. Hey, it's extra flight time! Limping around the pattern, I'm thinking of more than a few things for the debrief. At least


the next try is a rails pass to an OK 3-wire (or was it a tic-the-two, skip-the-three, and set the hook for the fair four? I never can remember.)

I learned a great deal that night. A dark night behind the boat at 1,200 feet is no place to be messing with your jet's configuration. I should have discontinued the approach as soon as I realized the flaps weren't going to 30. (The skipper had the same problem a few nights later and that's exactly what he did.) There's nothing wrong with taking it around if something's amiss. This was especially true in our case, as I wasn't absolutely sure where the flaps were; moving them up at that speed could have been disastrous.

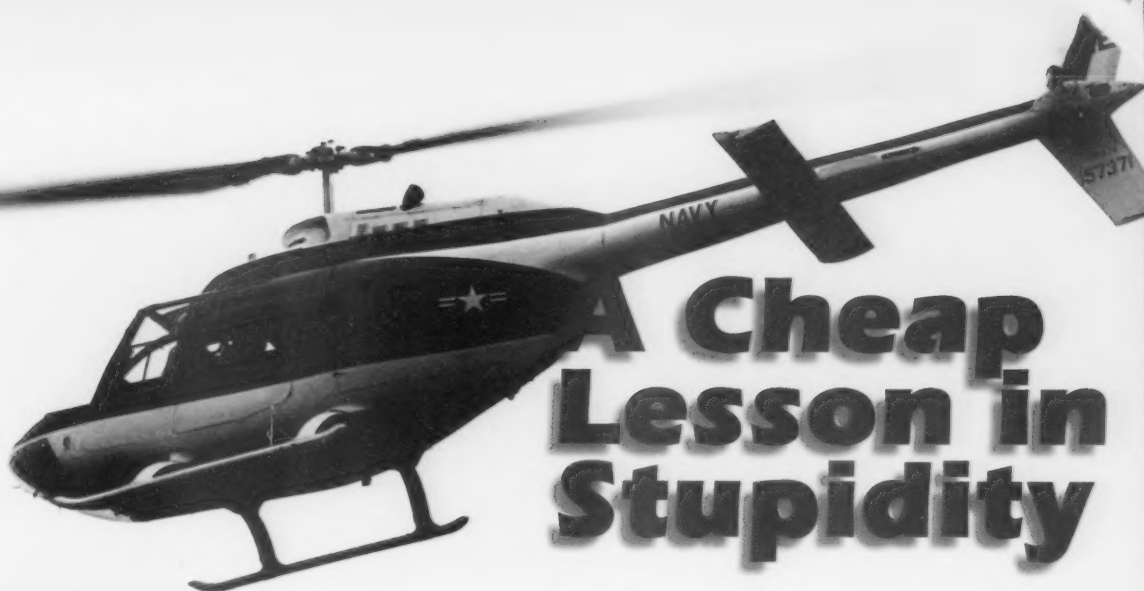
We suffered a major breakdown in crew coordination and communication right when we needed it most. In our crew briefs, we stress not addressing any emergencies down low until we have some altitude and are in control of the jet. We had control, but I somehow forgot the altitude part. We also brief that one backseater will back up ECMO 1 on the checklist and the other will back up the pilot on airspeed, altitude and attitude. Both backseaters got wrapped up in the checklist, and even with four sets of eyes in the cockpit, we lost 400 feet (and would have lost more if the flaps hadn't come down when they did.).

The softened radalt tone coupled with the flap discussion made all four of us miss it when it went off passing 1,000 feet.

Finally, the desire to be a "hacker" is a very real and unforgiving danger, especially around the boat. Descending through 800 feet really shook me up, but I thought I could salvage the approach even though I was almost out of parameters.

Let's see, I had two choices. First, discontinue the approach because of a legitimate problem and come around for what likely would have been a normal pass (it couldn't have been any worse). Or, second, try to hack it, scare the hell out of myself, and fly a terrible pass to a waveoff. 

Lt. Jungemann flew with VAQ-140. He is now an IP with VAQ-129.



A Cheap Lesson in Stupidity

by Lt. Jeffrey Barta

CREW COORDINATION IS ONE of the hottest topics in naval aviation. You find discussions about ACT in single-seat and multiplace squadrons throughout the fleet, but these bull sessions are somewhat less common in the training command.

Initially, students are only opposed to ACT in the training command for two reasons. Such continuous prompting would not be found in fleet squadrons. However, it is a necessary evil in a VT because instructors must ensure students are learning the situational awareness and headwork required to become naval aviators. The second reason is a little less obvious and perhaps more dangerous. It lies within the instructors, themselves.


From the first day in the instructor training unit, IPs learn to fly whatever aircraft they will be instructing in as if they were by themselves. They are trained to handle any contingency as if the student wasn't there because, frankly, although the SNA may be there in body, his spirit might be somewhere else. As a result, NATOPS checks, category checkrides, and even annual EP refreshers are done to emphasize single-pilot procedures. (How about the boost-off ILS with an Nf/Nr overspeed in the non-visual simulator without a copilot?)

I was an experienced Cat I instructor, and I thought I had seen or heard every stu-

pid screwup that an average SNA could devise. But on this particular day, I added my own invention to the list.

I launched with a pair of FAM-1s into marginal VFR weather for the introductory dog-and-pony show at the local OLF. Halfway through the first event, I heard a weather recall across instructor common. I headed into the "Alamo" to top off and pick up the second student for the ride home. Air taxiing out of the hot-refuel pit, and still at the controls, I reached down to the center console to tune in a second frequency on the VHF hoping to get a better picture of the weather. As I did so, a gust of wind caught my TH-57B, nearly rolling it over. With my right hand quickly coming back onto the cyclic, I regained control.

In my hurry to get more information, I had reverted to the single-pilot mentality. Was that stupid? Although my student was only a FAM-1, he was perfectly capable of tuning a radio if I'd asked him. Crew coordination was not in our cockpit that day, and the only person to blame was me.

When we got home, I briefed my students about my stupidity and told them to never forget this lesson. Now, I brief that if someone sees anything less than two hands and two feet on the controls, speak up. 

Lt. Barta flies with HSL-47.

Eight Miles Inside



by Lt. Jun K. Lee

WE HAD JUST RETURNED from a deployment to the Gulf. With a busy schedule that was always under close scrutiny by various task-force commanders, it was good to put it all behind us.

After a break, we returned to business back home. On a glorious Northwest summer's morning, we prepared for a six-hour mission for basic crew qualifications—two quick rigs (photo runs), one full rig, and one acoustic-intelligence pattern of sonobuoys. Having been accustomed to eight-hour flights where we might conduct more than 50 rigs, this would be a piece of cake.

I had two copilots near the end of their training, only a bit away from the PPC designations. In the back, there were three instructor NFOs, two of whom had been instructors in the FRS. Furthermore, having flown with nearly everyone before, I was

feeling quite comfortable. Things couldn't be better.

The preflight went well, except for the computer. With an old war horse like the P-3, computer glitches are common. We couldn't get any fly-to points. We'd just have to fly off-line. Been there, done that.

After checking weather and NOTAMs, we launched. We got all our quals in less than half the time we had scheduled. Elated, my copilot suggested we amend our return clearance to airways that would provide additional training. Considering our capable crew, the chance for extra training, and the prospect of a short break, I swapped seats with the 2P and told him to make it happen as I headed back to the cabin.

le a Live-Fire Zone



Nearing a waypoint VORTAC, center advised us of an active restricted area nearby and offered direct clearance to homeplate. Eager to meet flight-hour requirements, the copilots declined. Following this decision, center revised our clearance and directed us to turn 3 nm before the VORTAC to stay clear of the restricted area.

As the mission drew to a close, the crew prepared for the post-mission analysis. As the chatter increased on the ICS, our attention was diverted from flying. The call from center brought us back.


"Navy, are you in a left turn?"

The controller told us he had us entering the restricted area. Quickly recovering his composure, the 2P immediately banked left.

Too late. We were already nearly eight miles inside an Army live-fire area.

The only thing an aviator dreads more than a mishap is a request from ATC to call them after landing. Sure enough, that call came. After another seat swap and vectors home, we recovered to begin the longest walk of my life to call Seattle ARTCC.

We got munched by our overconfidence. It's great to be sure of yourself, your crew and your aircraft, but you should never stop concentrating during the flight.

By nature and training, aviators are creatures of habit—checklists, emergency procedures, tactics. When we digress from procedures, such as changing our filed flight plan, we need to maintain our situational awareness and focus. 

Lt. Lee flies with VP-40.



200 Feet and

by Lt. Gary J. Patenaude

I WAS AN SH-60B FRS STUDENT with a new set of wings, looking forward to my first day and night at the back of the boat. I felt comfortable with the helicopter, and the task of landing aboard a pitching and rolling smallboy seemed less daunting with a veteran IP beside me.

The brief was detailed and clear. Three airplanes, four instructors, and a handful of students, all working together to complete the mission. Startup and takeoff went fine, and my confidence in this group of professionals grew. After the flight to the rendezvous point and the first landing to let the LSO off, we started the three-plane circuit of day DLQs.

That deck looked terribly small, but my instructor talked me down. Then the deck seemed unusually large. After two approaches and several landings in (well, OK, near) the trap, I was getting the hang of it.

I swapped with the next student and waited patiently in the hangar for my turn at night landings thinking about the day's suc-

cess and feeling confident that my instructor could get me through the night phase.

My turn in the rotation came later in the evening. I put on my helmet, visor down and marched to the flight deck. My first observation was, "Wow, it has gotten really dark." I checked to make sure I hadn't put my dark visor down. A cloud deck had moved into the operating area. I had been hoping for some stars on the horizon.

Amazingly, the deck looked even smaller than it had during the day. However, my vigilant instructor again talked me into the landing pattern, and I was on my way. Several more passes and my confidence was back up.

"I can do this!" I thought. "This is really great."

I was the last student to finish, so I got the good deal of flying home. On my last landing, we took the chocks and chains, loaded up with passengers for the return, and launched. Then the safety net I had been building during the day began to come apart.



Heading Down!

I reported, "Three rates of climb." The instructor pushed the nose forward. As we gained airspeed, I called, "Safe single-engine speed, stabilator programming." I checked the altimeter one more time, and we were climbing through 500 feet on our way to 1,000 feet. I dutifully broke out the after-takeoff checklist. We were on our way home.


The first sign that something was wrong was the whistling sound I heard outside the cockpit. A glance at the airspeed indicator showed a far greater-than-average speed for the climb. My next glance told the true story. The radar altimeter was rapidly winding down through 300 feet. I double-checked the VSI, not believing that we were headed for the water—at 1,000 fpm.

"I have vertigo," my instructor said. "You have the controls." I looked at him in disbelief but soon switched my scan to the radar altimeter, which read 200 feet and going down. While adding power and pulling aft stick, I focused on the attitude indicator.

"Where in hell did my safety net go?" I wondered.

We pulled out somewhere below 200 feet. I'll never know the exact altitude because I did not hazard another look at the altimeter until we were well above 1,000 feet.

Later, we discussed what had happened. My instructor said that watching the lights of the boat fall away as we pulled power had given him a severe case of vertigo.

While thinking about this night during the following years, I realized there were more pervasive and devious problems. I had been focused on landing aboard the boat. Takeoff and departure were the "easy" parts. Though you might be headed out to do something new and difficult, stay focused on the entire flight regime. The biggest disappointment of the evening was that I had been relying on someone else to ensure safety of the aircraft and our crew. I was not fully prepared. 

Lt. Patenaude flies with HSL-51.



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I wondered.

We pulled out somewhere below 200 feet. I'll never know the exact altitude because I did not hazard another look at the altimeter until we were well above 1,000 feet.

Later, we discussed what had happened. My instructor said that watching the lights of the boat fall away as we pulled power had given him a severe case of vertigo.

While thinking about this night during the following years, I realized there were more pervasive and devious problems. I had been focused on landing aboard the boat. Takeoff and departure were the "easy" parts. Though you might be headed out to do something new and difficult, stay focused on the entire flight regime. The biggest disappointment of the evening was that I had been relying on someone else to ensure safety of the aircraft and our crew. I was not fully prepared. 

Lt. Patenaude flies with HSL-51.



Do I Have the F-16

by LCdr. John D. VanBrabant

MIDWAY THROUGH THE FIRST WORKUP for our three-ship SAG deployment to the Middle East, our detachment began to gel as an integral part of the Aegis weapon system. Having just finished a round of practice external-cargo lifts one morning, we received tasking to go to North Island for an unscheduled logistics run. Knowing full well that the package included a PMCS part for our second helicopter, not to mention the opportunity to get newspapers, call home, and eat a pizza, we gladly accepted the mission.

As I was taking on gas before launching, I asked ASTAC for pigeons to North Island. ASTAC replied with a brief, "One ten magnetic." We launched, turned to 110, leveled at cherubs four, pulled an arm full of collective and at the speed of heat—well, helicopter heat—made for the beach.

A few miles out, our ASTAC called, "Sour India," followed by, San Clemente Island should be at your 11 o'clock for 50 miles. Be advised stiff-wingers are operating at the field, FCLPs." I acknowledged without a care in the world while visions of pepperoni danced in my head. Fifteen minutes later, I decided it was time to contact Beaver Control and check in; however, having taken a circuitous route to avoid San Clemente, comms with Beaver were not happening. I relayed my problems to homeplate, and ASTAC replied with something like, "Gee whiz, tough break, glad I'm not with you."

Doing my best Emmett Smith imitation, I put my head down and pressed on. What could possibly happen to me? This is my home field. Everyone loves me here. I'll just tell tower I came off "Cherry Tree" and will be in for gas and mail and be off again in 60 minutes. So I checked with "Cherry Tree" and told them to expect to hear from me in about 90 minutes.

Being an aviator ready for anything, I had cleverly set our radios to receive any guard transmission. You never know when you may have the opportunity to get the old Sikorsky "S." Wouldn't you know it, instead of a call for help, we heard one of those pesky, unknown rider calls with a plea to contact someone on some frequency. This challenge continued for some time and began to annoy me as we neared home field. I even turned off my guard receiver while trying to get ATIS and contact tower.

I finally got the tower and asked for the channel approach and a landing at pad 10 for the hot pits. They cleared me and, as we were turning final, asked for our squadron and where our flight originated from. See? I told you they loved me here!

As I taxied into the line, full of fuel and full of myself, the SDO got on the radio and told me to come on up to Charlie Oscar's office while the crew loaded the aircraft. Brushing the salt from my shoulders, I headed for my summit with the skipper. As I marched through the hangar, I was so curious as to what the CO wanted to see me about that I failed to notice people moving out of my way much as they would for a

Have to Pay for F-16s' Fuel?

leper. That should have been my first clue.

When I arrived in the front office, I was stunned to find out (especially from the skipper) that a section of F-16s had launched to intercept my aircraft. I had failed to contact any controlling agencies, and my mode IV IFF was not operating before I penetrated the ADIZ. In my haste to complete the morning training mission and head for the beach, I had failed to realize that the ship had exited the ADIZ approximately one hour earlier. This little adventure had not only wasted the time of the alert aircrews and launch personnel, but had also cost Uncle Sam about \$10,000 for the fuel the F-16s burned to find my aircraft. The only reason that I didn't get to practice my 1 v 2, helo v jet evasive maneuvering was a solid cloud deck at about 1,000 feet. This saved me

the embarrassment of flying lead for a section of F-16s.

The lesson here is obvious: I had become complacent working off the coast of my home field. I had been in and out of there a million times, knew the rules cold, and had the flight wired. We've heard it before: keep your guard up and question everything. The "sour India" call from homeplate should have raised a flag in my mind, and if it had, I could have avoided this whole mess. Even close to home, situational awareness must include geographic position and, much like buying real estate, location is everything.

LCdr. VanBrabant
is OinC of HSL-47's
Det 10.

I was stunned to find out that a section of F-16s had launched to intercept my aircraft.

POP-UPS

NOTAMs Now on Internet

The long-awaited DOD Internet NOTAM service (DINS) has arrived. When units can provide consistent, quick and reliable Internet access to the DINS website for local and transient aircrews, they can remove their NOTAM boards from the wall. Paper NOTAMs will stop being transmitted on Sept. 30, 1998.

Base operations will continue to be the focal point for NOTAMS. A base's operations tempo will determine how many PCs will be needed in aircrew flight planning rooms.

Many local aircrews can access DINS from their flight operations sections. NOTAM support for transient aircrews can be at the base operations counter or a PC with a printer in the flight-planning room. For help, call the military NOTAM coordinators at DSN 994-4205/6/7.

NOTAMs will be created, cancelled and replaced via the Internet. But don't get rid of your COMEDs or AWDS equipment just yet, as this is expected to take a few months.

Several bases noted their comm squadron installed a firewall within their base LAN that checked all Internet traffic. In some instances, the LAN firewall became saturated, which caused aircrew NOTAM requests to "time out" and Internet access to be denied. The base server may need to be programmed to allow timely processing of NOTAM programs.

The system requires a 486 or better IBM compatible PC with connectivity to the Internet and an Internet browser (Netscape or Internet Explorer versions 3.0 or higher).

Point-of-contact is LtCol. Michael Williams (703) 904-4465 or email: "MICHAEL.WILLIAM@FAA.DOT.GOV". OPNAV POC is ACCM G.E. Field at (703) 604-7712 (DSN 664).

Tomcat's VDI Can't Take the Heat

The VDI (vertical display indicator), the F-14 pilot's primary attitude reference, had an exceptionally high failure rate during a recent deployment in the Arabian Gulf.

In the first four months of one squadron's deployment, 17 VDIs failed during cat shots. An average of 21 discrepancies was found for each of the squadron's 11 aircraft, requiring 426 man-hours to repair. Mean-time-between-failure was 3.5 hours, a rate approximately nine times that of shore-based squadrons and twice that of Tomcats operating on carriers in cooler environments.

VDI failure during a night cat shot is disconcerting, but add an emergency, such as an engine failure where aircraft attitude reference is critical, and the stage is set for a mishap. To reduce the heat stress on the VDI, pilots turn it off on deck after checking for proper operation.

One official said the failures aren't new to the F-14A/B community, adding "a reliable attitude reference, commensurate with current technology, is long overdue. The degraded performance of our VDIs is unacceptable."

The squadrons investigated possible sources of the failures, including organizational and intermediate maintenance procedures, but didn't find a common factor other than the age of the VDIs and the heat stress during summertime carrier ops in the Arabian Gulf.

Squadron corrective actions (already completed) were to brief aircrews on ways to reduce VDI failures and train them on what to do when they fail. They added that COMNAV-AIRSYSCOM should expedite acquisition of a replacement for the existing Tomcat VDI system.

Seeing Is Believing?

A couple of H-53 crews may take exception to this adage. After conducting thorough preflights, with no discrepancies, they assumed they were ready to go. But their visual check of the bullseye on the tail gear box (TGB) had deceived them.

Since April 1998, one mishap has occurred and two separate hazard reports have been submitted with one common denominator: staining on the sight gauge used to check oil servicing of the tail-rotor gearbox. The stain gave the illusion of a properly serviced TGB when someone visually inspected it.

The most recent event at HM-14 occurred during a ground turn. Shortly after reaching ground idle rpm, the pilots noted that the tail-rotor oil-pressure caution light didn't extinguish. They immediately shut down. A troubleshooter used a B2 stand to inspect the oil-quantity level. It appeared to be within acceptable limits (middle of the bullseye), but after shaking the tail skid, he found that the "oil" in the sight gauge didn't move.

With sight windows being the only means to check the servicing of dynamic components, it is crucial that aircrew see the real thing. Lack of oil in the TGB can be catastrophic. HM-14 adopted an interim practice of shaking the tail skid to make sure the oil in the sight glass moves, until NAVAIR gives further guidance.

PH2 Matthew J. Thomas



Tomcat Wing-Sweep Motors Ailing

Some F-14s are having trouble moving their wings because their wing-sweep motors are failing.

NADEP Jax has done 16 engineering investigations on motors failing in the fleet during the past two years. Thirteen involved the piston shoes of the small (unsweep) motor. The F-14 fleet support team (FST) is checking possible design flaws. The F-14 is the only Navy aircraft with variable wing-sweep.

One Tomcat squadron reported five failures in the last year, four in the last five months. The average mean-time-to-failure was less than 1,000 hours operating time, compared to the regularly scheduled replacement time of 1,800 hours.

The squadron CO noted that the high failure rate is "a community-wide concern, which must be addressed before it becomes the primary causal factor of a mishap." No mishaps have resulted. When a Tomcat's wing won't swing, the pilot has been able to bring it in using other means, such as flaps or rudder trim, to compensate.

The FST is also asking that all in-service failures of P/N 901119-19 (port) and 901118-19 (starboard) wing-sweep motors be submitted for engineering investigation. Once a piston shoe separates, the motor usually continues to rotate and causes secondary damage to the rotor components, making what causes the problem difficult to find. The FST hopes to determine the problem by inspecting more failed motors.

Edited by Bud Baer. Contributors can contact him at (757) 444-3520, Ext. 7246 (DSN 564). E-mail address: hbaer@safecen.navy.mil



Sensory

In the meantime, we had to make sure the down, which it did. We needed to save so so we raised the gear. I wasn't touching the flaps unless I had to.

by LCdr. Bill Lawler

IT WAS A BEAUTIFUL DAY in the Puerto Rico op area, and the simulated war was just beginning. The squadron desperately needed another Prowler; I was sure we could deliver. We had a 1+40-cycle to do our FCF "C" (the Charlie profile takes about 20 minutes in the EA-6B), and all that had been worked on were the slats.

The on-deck checks went smoothly, and the ship launched us on time. The gear came up normally. Passing the prescribed minimum airspeed, we raised the flaps and slats. I even pulled back the power a little to keep the airspeed down to help the slats retract. Slat-retraction problems have recently become common in our community, and most aircrew are well acquainted with the procedures.

As we climbed to 500 feet, I noticed that the IPI displayed a barberpoled slat. A quick look in the mirrors showed both slats appearing up, with the port inboard slat not quite aligned perfectly. Having seen this many times before, I then went straight to

Step 9 of the checklist, which recommends a slight negative-G bunt. Without thinking of my altitude, I pushed the stick forward at 400 feet!

Why was I looking in the mirrors at low altitude and 230 knots with less than two G's available? Wasn't I the guy at the stand-down last week who told everyone not to let things get routine and do something stupid? Do as I say, not as I do! Doesn't step 1 of the checks say something about safe airspeed and power setting? I don't think 80 percent at 400 feet and 56,000 pounds falls into that category.

Although it is common practice for Prowler crews to bump the nose with this slat malfunction, I don't recommend it below 1,000 feet. In any case, the negative G didn't work.

After that scare, I decided 10,000 feet might be a better place to troubleshoot this problem. Although I have seen barberpoled slats many times, this was the first time a bunt (or multiple bunts) didn't work. I'd never done the complete checklist (aside from the bunt), except in the simulator.

Overload

the gear would come
me gas,



Lt. Craig Wevie

After cycling the flaps and slats electrically and hydraulically, as well as several more bunts, the slat finally cleaned up on step 14.

The jet was hard down now. Should we continue with the FCF after going through 14 steps? Sure, maintenance could really use some troubleshooting to help fix this problem. Forty minutes later, we were light enough to do our 5,000-foot checks, but still wondering if we should call it a day. Always follow your first instinct, right? Not this time.

We lowered the flaps and slats electrically, per the FCF checklist, and after raising them, the slats were barberpoled again. Great, now we couldn't go into the break. We tried going straight to step 14 since it had worked last time. Nice call—we just locked the slats about one inch down, and they were not going to budge again that

flight. We decided to get the flaps down. Why did it take 30 seconds to get a flaps-30 indication instead of the normal 10-12 seconds? Time to call for a Prowler rep.

Two emergency checklists later, we realized we had a choice: a flaps-30, no-slat approach to mother, or a 150-mile divert, hoping we could get everything up for a no-flap-no-slat pass. But weren't we getting certified for blue-water ops today? Actually, the captain had the choice, and we knew that with any configuration problem, it would take a little time for the captain (with our skipper's help) to decide.

In the meantime, we had to make sure the gear would come down, which it did. We needed to save some gas, so we raised the gear. I wasn't touching the flaps unless I had to. It couldn't be a hydraulic problem because those systems check good.

The backseaters searched for a bingo fuel with flaps down and gear up, but NATOPS doesn't cover that configuration. They chose the 6,200-pound bingo for gear down and flaps up. We frontseaters were busy scrambling through checklists and bit

After going through our fifth emergency checklist, we pressed as ECMO I gave tower a heads-up that we'd be shutting down, stiff wing and no brakes, in the wires.

off on this bingo, with about 7,500 pounds remaining (15 minutes until bingo). Now we had the Air Boss's attention, and a tanker plan was worked out.

We were at 6,500 pounds, heading dirty to the Intruder for a drink when ECMO 2 said, "Oops! That was a flaps-up, gear-down bingo. A true dirty bingo is 7,700 pounds. I know the slats are stuck, but could we raise the flaps electrically?"

After I assured the Boss we could almost clean up, I promised him we didn't have any problems with the landing gear.

With 6,000 pounds of fuel, we quickly rendezvoused on the Intruder, which had just finished successful package checks with the off-going tanker. Basket out, thumbs up, amber light and let's stabilize.

"What was that red light on the buddy store?" I wondered. "Tanker's sour. Let's join on the second Intruder a mile on our nose. We can use a clean bingo of 4,000 pounds."

On the second rendezvous, we had a little too much closure. We popped the boards, but why weren't we slowing down? The speed brakes would not fully open. What was that whining noise?

"Boss, remember I said the gear was fine? I lied. We've got a combined hydraulic failure on both sides and will have to blow the gear down." I'm really happy I raised the gear now. Once we blow the gear, they are down for good. What's that flaps-up-gear-down bingo?" I asked. "Remember to add some extra fuel, because the bingo profile doesn't include slats slightly extended or the forward gear doors open."

We received 500 pounds from the second tanker before he went sour, too. Sensory overload. We had several bingo and approach options, and now an airborne squadronmate wanted to get into the act. We deselected base on the third radio. The tanker recycled the basket, and it worked this time. Our fuel problems were solved, and we now had a tanker as wingman for the rest of the hop. We thought the buddy store


was advertised for as low as 150 knots, and we were plugging at 170 knots to save gas. The fact that both tankers had just been sweet at 250 knots should have clued us to tank at a higher airspeed.

The Boss had been the calming influence for the first 30 minutes, but the gear blowdown started to cause some real concern in the tower. Tower and paddles were clear on the approach configuration, speed, AOA, weight, as well as being aware of this configuration hazard in the EA-6B. We wouldn't be able to get the speed brakes open. We'd be at 13 units instead of 17, which adds about 13 knots to our approach speed. The big problem is that with the flaps-30-no-slats (or close to it) configuration, flight qualities rapidly deteriorate above 14 units, and a rapid pitchup and wing drop occur at 15 units.

The Boss pushed us for the visual straight-in once we had three down-and-locked.

After going through our fifth emergency checklist, we pressed as ECMO I gave tower a heads-up that we'd be shutting down, stiff wing and no brakes, in the wires. We ignored the left generator light at two miles and trapped with both frontseaters and paddles hawking the AOA.

Would all this have been necessary if we had stopped the FCF when it was apparent the aircraft was down? The hydraulic failure turned out to be a leak unrelated to the jammed slat screwjack. The scariest part of this flight was just after launch when we failed to prioritize properly, which could have turned a relatively minor malfunction into a mishap report. Make sure your entire crew is aware of all bingo configurations, so you don't add unwanted decisions to your problems.

Postflight review of A-6/S-3 air-to-air refueling limits revealed that greater than 220 knots is usually required, and in emergencies you can tank as slow as 180 knots. Above all, punch that clock and fly the aircraft. Don't rush your decisions when you have multiple choices and lots of time. 

LCdr. Lawler flies with VAQ-132.

With Four of a Kind



by Lt. Norman Metzger

WE HAVE ALL BEEN TO FALLON and hit the tables a little, or at least rolled for rounds at the club. Usually four of a kind is a good thing, but here is one occasion where it definitely was not.

The hand I was dealt started with a typical beautiful VFR day at NAS Fallon. I was flying as wingman on my last FRS LAT (low-altitude training) hop consisting of low-altitude section maneuvering. We headed to Dixie North, and most of the flight went as planned.

About the time we reached joker, my hand started to turn sour. While in the northeast corner of the area, I heard two thumps as the ECS shut off. I looked inside to see both bleed-air warning lights glowing red as

About the time we reached joker, my hand started to turn sour.



Betty—the audible voice warning—started. I climbed and turned for home.

Calmly, I told lead of the indications, while going over boldface in my mind. Since my aircraft did not have OBOGS, the self-generating oxygen system, there were no immediate action steps. I started looking for secondaries as lead declared an emergency 50 miles from the field.

With no further indications or problems, he broke out the PCL and read the remaining procedure: cycle the bleed-air switch to off.

I was comfortable with the situation. I'd had bleed-air failures in other aircraft, and the emergency shut-off systems had always worked fine.



Still no visual confirmation of fire, just four out of five red fire lights staring me in the face.

About 60 seconds after I shut off the bleed-air switch, I got a big surprise—dual engine-fire lights! I radioed lead with more than a little urgency in my voice and reported the slowly deteriorating situation. He reported no smoke or fire coming from my aircraft. With throttles set at 82 percent (minimum for flight), I started analyzing every engine indication I could. There was no evidence of one engine being better or worse than the other, and all engine indications were still within limits.

Recognizing that only one halon bottle existed in the fire-extinguishing system for both engines, I could not afford to waste it. I needed to determine what my next course of action would be. Still no visual confirmation of fire, just four out of five red fire lights staring me in the face.


I set up for a five-mile straight-in to runway 13, which pointed me right at town. As I kept looking for something to help me decide which engine to shut down, I started thinking about what I would do if I had to eject—turn away from Fallon, get the nose up, good position and pull. I did a quick check to make sure I knew the location of that little black-and-yellow handle. Then as quickly as the engine-fire lights had come on, they went out. Now back to just the bleed-air warning lights, I landed unevent-

fully, taxied clear and shut down.

As I got out, I could see why the fire trucks had approached so closely and why the men in silver suits were so attentive and excited; smoke was coming from the jet. The crash crew helped me down as the gravity of my situation set in. Even then, I had no idea about the extent of the damage. In the bleed-air ducting area between the engines, a combination of valves had failed, and everything from sheet metal to wires had been burnt, buckled and melted.

Another attention-grabbing realization was the damage sustained to the No. 4 fuel cell's aft bulkhead, which is directly forward of this area. According to some educated estimates, I had one to five minutes of flight time remaining.

A fire light is a positive indication of fire or excessive heat in a sensitive area. Both engines were fine. The engine-fire lights illuminated because of the excessive heat near the fire-detecting elements. As far as what to do with all those lights, all I can say is what an instructor told me during an EP simulator. "It's probably the toughest decision to make: maybe shut down one and hope, or don't shut down either engine and gamble."

I gambled, followed procedures and won. 

Lt. Metzger flew A-6s and is transitioning to the FA-18 with VFA-106.

What's a FEDEX Jet Doing at a Naval Air Station? continued from page 11.

"Venom Five One Five, Norfolk Tower. Don't worry about it. It happens all the time. We watched you turn into our pattern and knew exactly what you were doing, just waiting to see when you'd realize it. Heh-heh. You're cleared a left turn out. Contact Chambers Tower on three four zero point two. Have a safe flight, guys." Easy for him to say.


When we landed, we discussed what had happened and how. We realized we had hurried to get the part back to the ship. Our minds were not on the mission but at sea. We didn't maintain our situational awareness. The tacan display should have clued me in—along with the purple jet on the ramp—that we were at the wrong airport.

Because we were VFR, and I assumed we knew where we were going, looking at the tacan didn't seem that important, especially since the field was in sight. On downwind, I noticed heading 230, not 280 as expected. I thought the tacan was doing "crazy stuff" and ignored it.

We didn't plan or brief the mission properly. No one broke out a VFR chart to check the field and surrounding area before we launched. If we had, we would have

noticed there are three fields in close proximity—Chambers, Norfolk International and Oceana. We mistook Oceana for Norfolk International, and assumed the next field was Chambers. As we flew by what we thought was Norfolk International, we should have checked the orientation of the runways and compared them with the VFR chart or approach plate.

I never told the HAC about my confusion or about the "wrong" reading on the tacan, especially since Chambers kept saying they didn't have us in sight. We also didn't tell tower we were entering his pattern; if we had, we might have avoided the confusion.

Something I carried over from flight training is to say the leg of the pattern I'm on over the radio. I'm sure we've all had occasions when the active runway changes from the ATIS or tower wants you to land on a different runway than the one you're cleared to. Calling your position helps clear up confusion, doublechecks your intentions and location, and lets everyone in the aircraft know what you're doing and what to look for. 

Lt. Curtis flies with HSL-48.



On Cat 1

Articles coming in October

Barricading Black Knight 207

With two down, the nosegear barely out, and no gas, this Hornet pilot has little choice.

Black-Hole Nightmare

An OinC's worst dream comes true.

Flames on Final

Problems on the stroke and an in-flight fire. This Tomcat crew has to get back aboard.

*No approach
is so bad...*

That it can't be
SALVAGED



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